



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,739	02/03/2004	Weiling Peng	HARDI.007C1	1004
60148	7590	07/18/2007	EXAMINER	
GARDERE / JAMES HARDIE			THOMPSON, CAMIE S	
GARDERE WYNNE SEWELL, LLP			ART UNIT	PAPER NUMBER
1601 ELM STREET			1774	
SUITE 3000			MAIL DATE	
DALLAS, TX 75201			DELIVERY MODE	
			07/18/2007 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/770,739	PENG ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Camie S. Thompson	1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on Amendment filed May 4, 2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

*1-3, 8*

- 4) Claim(s) 1-8 and 10-29 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 20-21 and 27-28 is/are allowed.
- 6) Claim(s) 1-3, 8, 10-18, 22-26 and 29 is/are rejected.
- 7) Claim(s) 19 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>212807, 6/20/07</u>	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed May 4, 2007 are acknowledged.
2. Examiner acknowledges amended claims 1-3, 8, 13-20 and 22-29.
3. The serial number is listed incorrectly on the claims and applicant's arguments.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 8, 10-18, 22-26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Guyette, U.S. Patent Number 5,425,986.

Guyette discloses a high-pressure laminate structure that can be suitable for flooring (see column 1, lines 44-62). The Guyette reference discloses a laminate structure comprising a fiber cementboard as a core layer or substrate (11) having a top and bottom surface and at least one resin impregnated sheet (30) on at least one side of the substrate (see Figure 1). Additionally, the reference discloses an adhesive (20), which can be an isocyanate/urethane, epoxy or polyvinyl acetate that is between the substrate and the at least one resin impregnated sheet (see Figure 2 and column 6, lines 15-35). Column 4, lines 49-68 of the reference disclose that the resin used to impregnate the sheets include melamine-formaldehyde resin and phenol-formaldehyde resin as per the instant claims. Also, Figure 1 of the reference discloses that a resin-impregnated paper (30 and 31) can be laminated to both sides of the substrate. Additionally in Figure 1, another

Art Unit: 1774

resin impregnated (41) sheet can be laminated onto another resin-impregnated sheet (30) as per instant claim 12. The elongation, modulus of elasticity and glass transition temperature are physical properties of the epoxy films. The Guyette reference discloses in column 6 that the epoxy is well known in the art and are commercially available. Applicant admits in paragraphs 0015-0016 that the polymeric film that is used as the elastomer can be a thermosetting polymer such as epoxy.

6. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not provide for the recited building material, further including at least one adhesive layer between the cementitious substrate and at least one resin impregnated paper.

7. Claims 20-21 and 27-28 are allowed. The prior art does not provide for the recited building material, further including the elastomeric film having a thickness of about 5 mil or less and has an elongation between 20% and 1200%, wherein the modulus of elasticity at 100% elongation of between about 10 and 10,000 psi, and wherein the elastomer has a glass transition temperature between about -90 and 50 °C. Additionally, the prior art does not provide for the recited building material, further including at least one adhesive layer between the cementitious substrate and at least one resin impregnated paper.

***Response to Arguments***

8. Applicant's arguments filed May 4, 2007 have been fully considered but they are not persuasive. Applicant has amended claim 1 to include an adhesive on the surface of the

Art Unit: 1774

elastomer. Guyette discloses adhesive(s) (20) between the substrate and the at least one resin impregnated sheet. Applicant's instant claim 13 recites that the elastomer is an adhesive. Guyette discloses that the adhesive can be an epoxy or isocyanate/urethane. Applicant recites that the elastomer can be an epoxy or isocyanate/urethane (polyurethane). Isocyanate/urethane has a high elastic modulus and would provide sufficient stress relief. It is disclosed in column 6 of the reference that adhesive (20) are between the substrate and the at least one resin impregnated sheet. The reference does disclose the use of adhesives based on isocyanate/urethane and epoxy as the adhesives. Guyette describes a broad range of epoxy and would thus include epoxies that have elastomeric properties. Also, Guyette discloses the use of polyvinyl acetate as an adhesive. Polyvinyl acetate is known to be resistant to weathering, as is the elastomer claimed by applicant. Guyette discloses a broad range of adhesives (epoxy), which can include epoxies that are elastomeric. Additionally, it is disclosed in paragraphs 0015 and 0016 of applicant's disclosure that the polymeric film used as an elastomer can be a thermosetting resin such as epoxy. Instant claim 1 is a broad claim that has the same components as provided by the Guyette reference. Guyette has a polymeric film disposed between the cementitious substrate and the at least one resin impregnated paper. Instant claims 1 and 2 provide for a broad range of epoxies, which would include reactive epoxies. Instant claims 1 and 2 do not provide any distinguishing properties of the elastomer. Guyette and the instant application have the same components. Applicant argues that Guyette does not disclose or suggest the elongation between 20% and 1200% having a modulus of elasticity at 100% elongation of between 10 and 10,000 psi, which is very broad and would be encompassed by the generic polymeric film, epoxy or isocyanate. The rejection is maintained.

Art Unit: 1774

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached at (571) 272-1398. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ralph Low*  
SP6 1774